

# BIOS Update Release Notes

# PRODUCTS: NUC7i3BNK, NUC7i3BNH, NUC7i5BNK, NUC7i5BNH, NUC7i7BNH (Standard BIOS)

BIOS Version 0079 - BNKBL357.86A.0079.2019.0516.1758

## About This Release:

- Date: May 16, 2019
- ROM Image Checksum: 0x477A
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics
  - Option ROM: Build 1059 PC 14.34
  - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

- Updated processor microcode.
- Fixed the issue where the BIOS was inaccessible using the USB Type C port.

## BIOS Version 0078 - BNKBL357.86A.0078.2019.0425.1314

## About This Release:

- Date: April 25, 2019
- ROM Image Checksum: 0x0B8A
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics
  - Option ROM: Build 1059 PC 14.34
  - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

- Added ENERGY Star e-logo support.
- Implemented security fix.

## BIOS Version 0076 - BNKBL357.86A.0076.2019.0219.1646

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Date: February 19, 2019
- ME Firmware: 11.8.60.3561
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.6.4
- Integrated Graphics:
  - Option ROM: Build 1059 PC 14.34
  - UEFI Driver: 9.0.1084
- SATA RAID Option ROM: 16.8.0.1000
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

- Fixed issue where Thunderbolt Software always asks to approve device when Thunderbolt Security in BIOS is set to Legacy Mode.
- Updated BIOS code for security fixes.
- Updated VBIOS to Build 1059 PC 14.34.
- Updated GOP to version 9.0.1084.
- Updated Intel ME firmware to version 11.8.60.3561.
- Updated RST to version 16.8.0.1000.

#### Known Errata:

• Due to the Intel® ME firmware update in BIOS version 0076, you can't downgrade to version 0072 or earlier.

## BIOS Version 0072 - BNKBL357.86A.0072.2018.1222.1129

#### About This Release:

- Date: December 22, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics:
  - Option ROM: Build 1000 PC 10.46
  - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

- Fixed issue where disk encryption on Samsung eDrive doesn't work.
- Fixed issue where BIOS update via F7 fails
- Fixed issue where SGX tool shows "SGX has not yet been enabled per CPUID".

## BIOS Version 0071 - BNKBL357.86A.0071.2018.1102.1400

- Date: November 2, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Option ROM: Build 1000 PC 10.46
- UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

- Modified BIOS code for BIOS update failure while "Flashing FV data image".
- Fixed issue where S.M.A.R.T. function fails when using hard disk to boot.

## BIOS Version 0070 - BNKBL357.86A.0070. 2018.1019.1503

#### About This Release:

- Date: October 18, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 3.2.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

- BIOS code improvements.
- Fixed the issue where you couldn't update the BIOS via the power button menu option F7.
- Fixed the issue where Intel® Integrator Toolkit would not save custom settings.
- Added the option to select 1024 MB in the "IGD Aperture Size" setting and fixed the issue where the computer wouldn't shut down when it was set to 1024 MB.

## BIOS Version 0069 - BNKBL357.86A.0068.2018.0920.1250

#### About This Release:

- Date: September 20, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

• Fixed issue where consumer infrared fails when disabled, then re-

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- enabled in BIOS.
- Fixed issue where system can't enter sleep mode after attaching a USB Type-C device.
- Fixed issue where C-states aren't working correctly when using UEFI boot.

## BIOS Version 0068 - BNKBL357.86A.0068.2018.0824.1125

#### About This Release:

- Date: August 24, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

Fixed issue where system wakes when it's not supposed to.

# BIOS Version 0067 - BNKBL357.86A.0067.2018.0814.1500

#### About This Release:

- Date: August 14, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

- Set Consumer Infrared default to disabled for Windows RS4 support.
- Removed Intel® Ready Mode Technology items in BIOS setup for Intel security fix.

# BIOS Version 0066 - BNKBL357.86A.0066.2018.0724.1832

- Date: July 24, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

- Updated CPU Microcode (Security Advisory-00115)
- Fixed issue where BIOS customization for digital microphone and HDMI CEC doesn't work when using Intel® Integrator Toolkit.
- Removed Ready Mode related code/BIOS items for Intel security fix.

#### BIOS Version 0065 - BNKBL357.86A.0065.2018.0606.1639

#### About This Release:

- Date: June 06, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.15
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

- Updated the EC Firmware.
- Fixed CEC not working correctly.

## BIOS Version 0064 - BNKBL357.86A.0064.2018.0529.1711

## About This Release:

- Date: May 28, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- Integrated Graphics:
  - Option ROM: Build 1000 PC 10.46
  - UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

- Added security enhancements.
- Fixed issue with "F8 to Activate Windows Recovery Mode" prompt.

## BIOS Version 0063 - BNKBL357.86A.0063.2018.0413.1542

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Date: April 13, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- MEBx Revision: NA
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- SATA non-RAID Option ROM: NA
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

- Added a setup option "Audio DSP" which enables/disables voice control. The default is set to enabled.
- Removed the 1024 MB and larger options in the "IGD Aperture Size" setup item.

## BIOS Version 0062 - BNKBL357.86A.0062.2018.0222.1644

#### About This Release:

- Date: February 22, 2018
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- Memory Reference Code: Based on 2.8.1
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM(Legacy): 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

## New Fixes/Features:

• Updated CPU Microcode (Security Advisory-00088)

## BIOS Version 0060 - BNKBL357.86A.0060.2017.1214.2013

## About This Release:

- Date: December 14, 2017
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.12
- Memory Reference Code: Based on 2.8.1
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM(Legacy): 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

• Security Enhancements.

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Fixed the issue that would cause a yellow bang for "USCI USB Connector Manager" in device manager if the Intel® Optane™ Memory was removed
- Fixed the "no boot device found" issue when Intel® Optane $^{\text{\tiny{IM}}}$  Memory is enabled in the BIOS and a SATA device is being used.
- Updated the EC version to v8.12
- Updated the RC to version 2.8.1.
- Added the BIOS option "PCIe ASPM Support" and the default state is enabled. This is only an option on devices with board AA#:xxxx-304 and greater.
  - o You can use the command: Get-WmiObject Win32\_Baseboard Version to get the AA number.

## BIOS Version 0057 - BNKBL357.86A.0057.2017.1122.1550

#### About This Release:

- Date: November 22, 2017
- ME Firmware: 11.8.50.3425
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: 15.7.0.3054
- AHCI Code: Based on AHCI 13
- LAN Option ROM: v0.1.10 PXE-2.1 (build 092)
- Visual BIOS: 2.2.23

#### New Fixes/Features:

- Updated Management Engine Firmware to version: 11.8.50.3425 (Security Advisory-00086).
- Due to a security enhancement, it will not be possible to go to any BIOS earlier than BIOS 0054.
- Fixed Intel® Integrator Toolkit (Intel® ITK) issue that would cause a splash screen to not work correctly.

## BIOS Version 0054 - BNKBL357.86A.0054.2017.1025.1822

- Date: October 25, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
- Option ROM: Build 1000 PC 10.46
- UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
- Option ROM: v0.1.10 PXE-2.1 (build 092)
- UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Fixed the Smart Sound Technology yellow bang issue.
- Fixed the issue where ITK Custom BIOSs weren't working on BIOS 0051 and 0052.

## BIOS Version 0052 - BNKBL357.86A.0052.2017.0918.1346

#### About This Release:

- Date: September 18, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 08.09
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:

Option ROM: Build 1000 PC 10.46

UEFI Driver: 9.0.1066

- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision): 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:

Option ROM: v0.1.10 PXE-2.1 (build 092)

UEFI Driver: 0.0.15

• Visual Bios: 2.2.23

#### New Fixes/Features:

- Updated EC to version 08.09
- Changed the maximum size of BIOS setup item, "IGD Minimum Memory" to 64 MB.
- Changed the maximum size of BIOS setup item, "IGD Aperture Size" to 1024 MB

## BIOS Version 0051 - BNKBL357.86A.0051.2017.0901.1328

## About This Release:

- Date: September 01, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:

Option ROM: Build 1000 PC 10.46

UEFI Driver: 9.0.1066

- SATA RAID Option ROM: (Revision) : 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:

Option ROM: v0.1.10 PXE-2.1 (build 092)

UEFI Driver: 0.0.15

• Visual Bios: 2.2.23

#### New Fixes/Features:

- Added "wake on voice" (WOV) BIOS setting for hands free personal assistant support.
- Fixed an issue where "wake on USB from S5 was failing.

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Updated the help text for "Allow UEFI 3rd party driver loaded".
- Updated processor support.

## BIOS Version 0050 - BNKBL357.86A.0050.2017.0816.2002

#### About This Release:

- Date: August 16, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics:
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN:
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

#### New Fixes/Features:

- Security enhancements.
- Added the setup option "Allow UEFI Third Party Driver loaded" and set the default state to disabled.
- Due to a security enhancement, it will not be possible to go to any BIOS earlier than BIOS 0050.

## BIOS Version 0049 - BNKBL357.86A.0049.2017.0724.1541

## About This Release:

- Date: July 24, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

## New Fixes/Features:

• Updated Intel® Rapid Storage Technology (Intel RST®) driver to version 15.7.0.1014

## BIOS Version 0048 - BNKBL357.86A.0048.2017.0704.1415

## About This Release:

• Date: July 04, 2017

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- ME Firmware: 11.6.27.3264
- EC Firmware: (Revision) : 8.05
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1066
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision): 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- T.AN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

- Updated GOP Driver to version 9.0.1066.
- Updated processor support.
- Updated the EC to version 8.5. The fixes include:
  - o The fan would not run when Wake from LAN was used.
- Modified the Fast Boot and Intel® Optane™ Memory setup item behavior.
- Moved the placement of the Intel® Optane $^{\text{\tiny{IM}}}$  Memory warning from top left corner to the middle of the screen.

## BIOS Version 0047 - BNKBL357.86A.0047.2017.0518.1824

## About This Release:

- Date: May 18, 2017
- ME Firmware: 11.6.27.3264
- EC Firmware: (Revision): 8.02
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

## New Fixes/Features:

- Micro Code update to fix Hyper-Threading issue
- Update FW\_VERSION\_GUID for Windows update
- $\bullet$  Update EC to v8.2 to fix the LED effect when changing the always on mode to low brightness slow fade mode.
- Update ME to v11.6.27.3264

## BIOS Version 0046 - BNKBL357.86A.0046.2017.0503.1744

- Date: May 03, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 8.01

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision): 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

- Updated EC FW to v8.01 to fix LED ring bugs when setting the colors to red, green or white.
- Added EC initialized BIOS recovery capability.
- Added feature "EC Requirement update for LED."
- Thermal management improvement.
- Corrected CEC help strings.
- Fixed issue where 'Install Intel Platform Key' in BIOS was greyed out when Secure Boot was enabled.

## BIOS Version 0045 - BNKBL357.86A.0045.2017.0417.1728

#### About This Release:

- Date: April 17, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 7.10
- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision): 15.5.0.2875
- SATA non-RAID Option ROM: (Revision) : 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

# New Fixes/Features:

- Updated EC to version 7.10
- Added a warning message when the SATA mode is changed.
- Fixed an issue where the mouse would lag in BIOS.
- Fixed an issue where the system wouldn't reboot after BIOS update.

## BIOS Version 0042 - BNKBL357.86A.0042.2017.0303.1854

- Date: March 03, 2017
- ME Firmware: 11.6.20.1221
- EC Firmware: (Revision) : 7.02

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Memory Reference Code: Based on 1.7.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision): 15.2.0.2740
- SATA non-RAID Option ROM: (Revision): 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

- Updated EC to v7.2
- Fixed issue where USB Type-C ACPI Validation would fail.
- Changed maximum fan speed to 85% in Balanced/Quiet mode and to 100% in Cooling/fixed mode.
- Fixed an issue that would cause the system to halt with error 0x96 during a reboot.
- Updated Kaby Lake motherboard label to: 5.12 VEB 1ATQ0028.
- Updated RC to v1.7.
- Updated TXE to 11.6.20.1221.
- Updated EC to v6.42.
- Fixed an issue where the PCIe/NVMe m.2 drive would disappear.
- Fixed an issue where memory with an incorrect Trfc parameter in the SPD would cause the screen to flicker.
- Fixed cooling page so that 'Fixed Duty cycle option' in under fix mode.
- Changed, GPIO\_SKL\_LP\_GPP\_B17, to high.
- Added an error message when trying to flash the BIOS to BN0036 and earlier.
- Added support for FAN PWM smoothing change.
- Fixed a boot block fault tolerance failure.

## BIOS Version 0036 - BNKBL357.86A.0036.2017.0105.1112

NOTE: Due to an ME update, there is no way to downgrade the BIOS after updating to BIOS 0036.

- Date: January 05, 2016
- ME Firmware: 11.6.10.1196
- EC Firmware: (Revision) : 6.11
- Framework Reference Code: Based on 1.3.0.0
- Integrated Graphics
  - o Option ROM: Build 1000 PC 10.46
  - o UEFI Driver: 9.0.1056
- SATA RAID Option ROM: (Revision): 15.2.0.2740
- SATA non-RAID Option ROM: (Revision): 15.2.0.2754
- AHCI Code: Based on (Revision) : AHCI 13
- LAN
  - o Option ROM: v0.1.10 PXE-2.1 (build 092)
  - o UEFI Driver: 0.0.15
- Visual Bios: 2.2.23

<sup>\*</sup>Other names and brands may be claimed as the property of others.

- Updated the CPU microcode
- Updated the embedded controller to version 6.11.
- Fixed a fan issue where the minimum temperature value would restore to default on reboot.
- Fixed an issue where system couldn't enter into the Legacy RAID configuration menu.
- Fixed an issue where items that couldn't be modified via Intel® Integrator Toolkit would be shown.
- Added an error message if trying to flash to BIOS BN0026 or earlier.
- Fixed a real time clock wake up issue.
- Fixed an issue where the microphone array device always kept a high volume.
- Fixed an issue where a CIR remote wouldn't wake up the NUC when in S5.
- Updated a Cooling page setting by adding a fan curve balance mode for the i5 and i7 NUCs.
- Fixed issue where the F7 BIOS menu a M.2 partition would show as an unknown device.
- Fixed an issue where clearing the TPM from the secure jump menu would load the BIOS default setting.
- Fixed a Realtek\* controller (PCIE) SSID issue.
- Fixed an issue where the micro SD card reader lost its SSID after resuming from S3.
- Updated the Graphics Output Protocol (GOP) to version 1056.
- Updated the "Secondary Fan Off Temperature" default setting on the Cooling page.
- Fixed an issue where the SATA controller and onboard LAN controller would cause an IRQ conflict.
- Fixed an issue where a BIOS text item would be incorrectly displayed.
- Fixed an issue where the system would hang during shutdown when a USB Type-C device was attached.
- Fixed an issue where the F5 hot key for the Windows\* recovery environment didn't work.

# BIOS Version 0031 - BNKBL357.86A.0031.2016.1206.1405

## About This Release:

• Date: December 06, 2016

• ME Firmware: 11.6.0.1136

• Framework Reference Code: Based on 1.3.0.0

• Integrated Graphics

o Option ROM: Build 1000 PC 10.46

o UEFI Driver: 9.0.1053

• LAN

• Visual Bios: 2.2.23

• EC FW rev : 5.7

• RST driver: 15.2.0.2740

## New Fixes/Features:

• Initial production BIOS release

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